ENVIRONMENTAL CHEMISTS

Date of Report: 07/30/02 Date Received: 07/03/02

Project: Metro Self Monitor, PO# M68306

Date Extracted: 07/17/02 Date Analyzed: 07/17/02

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	Nickel	Zinc
Laboratory ID				
M68306	0.23	0.17	0.11	< 0.05
207026-01				
맞게 되었다고 않아 이란			Christian Person	
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05
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ENVIRONMENTAL CHEMISTS

Date of Report: 07/30/02 Date Received: 07/03/02

Project: Metro Self Monitor, PO# M68306

QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 207121-01 (Duplicate)

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	Reporting	Sample	Duplicat	e Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.22	0.15	a	0-20
Copper	mg/L (ppm)	2.7	2.0	30 vo	0-20
Nickel	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Zinc	mg/L (ppm)	0.70	0.65	7	0-20
	The second secon				

Laboratory Code: 207121-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recovery	% Recover	y Acceptanc	e RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Chromium	mg/L (ppm)	1	0.22	97	95	80-120	2
Copper	mg/L (ppm)	1	2.7	37 ai	31 ai	80-120	ai
Nickel	mg/L (ppm)	2	< 0.05	104	102	80-120	2
Zinc	mg/L (ppm)	1	0.70	92	91	80-120	1 3

Laboratory Code: Laboratory Control Sample

elibra Mažajija, k	Reporting	Spike	% Recove	ery A	cceptanc	e
Analyte	Units	Level	LCS	. NAME	Criteria	
Chromium	mg/L (ppm)	1.1	103		80-120	4
Copper	mg/L (ppm)	1	102		80-120	
Nickel	mg/L (ppm)	2	100		80-120	
Zinc	mg/L (ppm)	1	105		80-120	

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- vo The value reported fell outside the control limits established for this analyte.
- ai The amount spiked was insufficient to give meaningful recovery data.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

July 30, 2002

DUPLICATE COPY

INVOICE #02ACU0730-2

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M68306 - Results of testing requested by Gerry Thompson for material submitted on July 3, 2002.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 6010B @ \$80 per sample \$\\ 80.00\$ Amount Due\$\\$80.00

FEDERAL TAX ID #(b) (6)

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Address 628 S.	Hon	done .	SU					_						<i></i>		R			es author		
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	Ī										ANA	LYS	SES R	EQL	EST	ED					
Sample ID	Lab ID	Date Sampled	Time Sampled	Sar	nple Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	CK, Cu, Ni, 2~			3				Notes	
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ENVIRONMENTAL CHEMISTS

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July 30, 2002

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on July 3, 2002 from your Metro Self Monitor, PO# M68306 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures ACU0730R.DOC